ARGONNE NATIONAL LABORATORY

HIGH ENERGY PHYSICS DIVISION



ARGONNE WAKEFIELD ACCELERATOR

ELECTRICAL SAFETY PROCEDURES

Approved:

HEP-AWA Group Rep:

Date: 3/19/07

Leon T. Reed

HEP-ESH Administrator:

Date: 3/19/07

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Prepared:	The second second	Date 2517B 99
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P. Schoessow November 10, 1993 Revised Feb. 18, 1999

ELECTRICAL SAFETY PROCEDURES

The following basic procedures, which are a reiteration of previously stated procedures, shall be followed to insure maximum safety to personnel while installing and troubleshooting electrical equipment at the Wakefield Accelerator. Remember that thinking is the best safety procedure.

I. WARNING SIGNS

Signs shall be posted stating the voltage and/or current hazard present in the enclosure or area.

II. DRAWINGS

All circuit drawings shall be up-to-date, and this is the responsibility of the following persons:

M. Conde

P. Schoessow

III. ENTRY INTO ELECTRICAL ENCLOSURES - GENERAL

A. <u>Power Turn-off</u>

Turn off power to equipment and lock out and tag switch or breaker.

B. Grounding of Components

In those cases where reactive components such as capacitors, etc., are present, proper grounding of these components must be accomplished, using an insulated handle grounding hook. Do not depend upon automatic grounding equipment. Leave the grounding hook on the "power" side of the components to insure your safety.

Care must be taken in discharging systems with large stored energy as the resulting arc, during grounding, may cause eye damage or injury due to spattered hot metal. Safety glasses shall be worn.

C. Control circuitry

In many high voltage enclosures that have been "secured," there may also be present either a nominal 120V or 230V control circuitry that is energized from another source. — This hazard must not be overlooked.